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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,102	01/23/2007	Eila Piironen	0696-0231PUS1	7812
2292 7590 11/12/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
SASAKI, SHOGO				
ART UNIT		PAPER NUMBER		
1797				
NOTIFICATION DATE		DELIVERY MODE		
11/12/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/568,102

Applicant(s)

PIIRONEN ET AL.

Examiner

Shogo Sasaki

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5506)
Paper No(s)/Mail Date 2/13/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Interpretations

1. Regarding claim 18, the models; and the properties of liquid are not structures, and said limitations do not further structurally limit claim 18. Any further references to said elements (e.g., claims 25, 26, 30 and 31) were not given patentable weight.
2. Claim 18 does not positively set forth "a linguistic equation controller" as part of the claimed subject matter. Any further references to said element were not given patentable weight even if those references further limit said unclaimed element.
3. Claim 18 does not positively set forth "a liquid" as part of the claimed subject matter. Any further references (e.g., claim 27) to said element were not given patentable weight even if those references further limit said unclaimed element.
4. Claim 18 does not positively set forth "a liquid treatment system" as part of the claimed subject matter. Any further references (e.g., claim 28) to said element were not given patentable weight even if those references further limit said unclaimed element.
5. Claim 18 does not positively set forth "a chemical" as part of the claimed subject matter. Any further references (e.g., claim 29) to said element were not given patentable weight even if those references further limit said unclaimed element.
6. Regarding claims 32-34, recitations directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
8. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. An invention/process is defined by a step(s) listed in

the body of the claim following a transitional phrase. Claim 1 does not include an open or closed transitional phrase (Currently in claim 1, the recitation "characterized in that" can only be interpreted to mean "wherein."); and does not include a physical/active step(s) of performing the process. Said steps are critical and essential to the practice of the invention. As to the dependent claims 2-17, it is unclear what limitation(s) in claim 1 is further defined by the limitations recited.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential step(s). The omitted steps are: at least a physical/active step of controlling an automated dosing system. A process claim cannot be properly defined without setting forth any steps involved in the process.

11. Claims 19-21, 24 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites a linguistic equation controller. However, recitations "said linguistic equation" in claims 19-21 do not have sufficient antecedent basis.

Claim 24 recites the limitation "the controller setup." There is insufficient antecedent basis for this limitation in the claim.

The term "intelligent" in claim 35 is a relative term which renders the claim indefinite. The term "intelligent" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Regarding claim 35, it is unclear how an analyzer can be labeled "intelligent" without reciting a structure(s) that establishes the meaning of intelligence accepted in the art (See [0081] of instant application.).

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 18-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Jusso (Proceedings of workshop on applications in chemical and biochemical industry, pp-1-8, 1999. Note: The publication date for this article was provided by applicant.).

Regarding claims 18-35, Jusso discloses a device comprising:

- controllers (models as controller and/or dosing controller: pages 3-7);
- characterized in that at least one of said controllers is a feedback controller (page 7, line 5);
- characterized in that at least one of said controllers is a feed-forward controller (page 4, line 6: Steady-State model as feed-forward controller);
- characterized in that the controller setup comprises one of more cascade controllers (The feedback controller may be considered “master” and the feed-forward controller may be considered “slave,” or vice versa.); and
- characterized in that it further comprises an intelligent analyzer (page 5: The turbidity will have to be measured by an analyzer.).

14. Claims 18-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Jusso (Engineering Applications of Artificial Intelligence 14 (2001) 629–653).

Regarding claims 18-35, Jusso discloses (Instrumentation at the Wisaforest Mill: entire disclosure) a device comprising:

- controllers (entire disclosure; and Fig. 10);
- characterized in that at least one of said controllers is a feedback controller (page 651: 7, lines 16-26);

- characterized in that at least one of said controllers is a feed-forward controller (page 639: 5.4);
- characterized in that the controller setup comprises one of more cascade controllers (The feedback controller may be considered "master" and the feed-forward controller may be considered "slave," or vice versa.); and
- characterized in that it further comprises an intelligent analyzer (page 638: 5.2, gas analyzer).

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shogo Sasaki whose telephone number is (571)270-7071. The examiner can normally be reached on Mon-Thur, 10:00am-6:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Brian R Gordon/

Primary Examiner, Art Unit 1797